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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,662	07/19/2006	Mitsunari Kojima	050070-0111	7332
20277 7590 11/13/2009 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096				
EXAMINER				
MAHASE, PAMESHANAND				
ART UNIT		PAPER NUMBER		
2612				
MAIL DATE		DELIVERY MODE		
11/13/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/586,662

**Applicant(s)**

KOJIMA ET AL.

**Examiner**

PAMESHANAND MAHASE

**Art Unit**

2612

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Status***

1. Claims 1-4 and 7 have been cancelled by the applicant and claims 5-6 are submitted for examination.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. The rejection for claim 5 and 6 based upon 35 U.S.C. 103(a) has been withdrawn in light of the applicant's amendments.

***Claim Rejections - 35 USC § 103***

4. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gudat et al. [U.S. Patent 4,072,364] in view of Salmon et al. [U.S. Patent 5,825,338], and further in view of Sumida [U.S. Patent 4,287,503] and Katagishi et al. [U.S. Patent Publication 2004/0210363].

Gudat et al. meets the limitation of a pulse generating device and pulse generator by disclosing a wheel speed sensor and shaping circuit (figure 1, items 2 and 21; column 2, lines 13-34). However, Gudat et al. fails to disclose a control device mounted on the vehicle.

In the field of display systems, Salmon et al. discloses a vehicle information display device that is able to display vehicle information such as the vehicle's speed, the selected gear, engine temperature, etc. (figure 8b, item 144) It would be obvious to one with ordinary skill in the art to combine the wheel speed sensor, shaping circuit, and display device to create a vehicle

display device that is able to display the vehicle's speed at any given time. However, the combination of Gudat et al. and Salmon et al. fails to disclose the use of a multiplexed line.

In the field of vehicle indication systems, Sumida teaches a multiplexer that is able to display selected items on a display apparatus (column 9, lines 16-30). It would be obvious to one with ordinary skill in the art to combine the wheel speed sensor, shaping circuit, display device, and multiplexer to create a vehicle information display device that is able to display the vehicle's speed as well as other pertinent vehicle information. However, the combination of Gudat et al., Salmon et al., and Sumida fails to disclose the display unit being a navigation unit.

In the field of information display, Katagishi et al. teaches a navigation system where the navigation display shows users vehicle information (figures 4-5; paragraphs 0005, 0032, and 0035). It would be obvious to one with ordinary skill in the art to combine the wheel speed sensor, shaping circuit, display device, multiplexer, and navigation unit to create a vehicle information display device that is able to display the vehicle's speed as well as other pertinent vehicle information.

With regard to claim 6, please refer to the rejection for claim 5 as the subject matter is addressed.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claim 5 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 4,835,467 to Gokhale discloses a magnetoresistive sensor monitors the passing of teeth on a rotating wheel and generates a DC biased speed signal. U.S. Patent 5,103,213 to Marsh et al. discloses a photo-optical coupler is connected to a shaft to provide a series of electronic pulses at a frequency corresponding to rotational velocity of the shaft. U.S. Patent 4,195,291 to Burks, Jr. discloses an electronic sensor for detecting motion and the rate of motion, particularly rotative movement, utilizes digital control apparatus wherein pulses are transmitted to a digital counter at a rate proportional to the rate of rotation of the member being sensed, and the pulses are compared with a time reference signal to produce a control sequence for comparing the pulses to predetermined set point values wherein an alarm or control signal is produced if the rate of rotation of the member sensed deviates between predetermined set points.

### *Conclusion*

7. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAMESHANAND MAHASE whose telephone number is (571)270-7223. The examiner can normally be reached on Monday- Friday 8:00AM - 5:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAMESHANAND MAHASE/  
Examiner, Art Unit 2612

/Daniel Wu/  
Supervisory Patent Examiner, Art Unit 2612